What is claimed is:

- 1. A method of collecting and arranging photoemission data relating to a plurality of die on a wafer, said method comprising: acquiring illumination and photoemission images for the die; and overlaying, aligning, and assembling the images into a mosaic.
- 2. A method as recited in claim 1, further comprising analyzing the mosaic.
- 3. A method as recited in claim 1, further comprising moving the wafer to acquire the images relating to the plurality of die.
- 4. A method as recited in claim 1, further comprising providing a camera and moving the camera to acquire the images relating to the plurality of die.
- 5. A method as recited in claim 1, further comprising providing a camera and moving the camera and wafer to acquire the images relating to the plurality of die.

- 6. A system for collecting and arranging photoemission data relating to a plurality of die on a wafer, said system comprising: a camera configured to acquire illumination and photoemission images of the die; a processor/controller in communication with the camera, said processor/controller configured to operate the camera to acquire illumination and photoemission images for the die, and configured to overlay, align, and assemble the images into a mosaic.
- 7. A system as recited in claim 6, wherein the processor/controller is configured to analyze the mosaic.
- 8. A system as recited in claim 6, wherein the processor/controller is configured to move the camera to acquire the images relating to the plurality of die.
- 9. A system as recited in claim 6, wherein the processor/controller is configured to move the wafer to acquire the images relating to the plurality of die.
- 10. A system as recited in claim 6, wherein the processor/controller is configured to move the camera and wafer to acquire the images relating to the plurality of die.